

Attorney Docket No.: 03-0431.01

Inventors: Belcher, et al



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

In re Application of: Thomas Seth Belcher, et  
al

Group Art Unit: 3711

Serial No.: 10/627,440

Filed: July 25, 2003

Examiner: Vishnu Mendiratta

Title: *A Portable, Adaptable Drawing  
Surface for Strategy Games*

APPELLANT'S APPEAL BRIEF

Assistant Commissioner for Patents  
Washington, D.C. 20231

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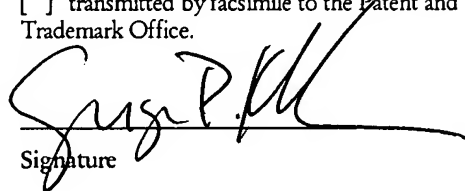
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Dear Sir:

Appellant hereby submits its Brief under 37 C.F.R. § 1.192 in support of its appeal, notice of which was filed under 37 C.F.R. § 1.191 on June 13, 2005 and date stamped received by the USPTO on June 15, 2005.

Concurrently, Appellant submits an Amendment to the claims pursuant to MPEP §1207. The amendment conforms to the requirements set forth in 37 C.F.R. §1.121.

#### **REAL PARTY IN INTEREST**

The real party in interest is BC Products, a Delaware corporation having its principal place of business at 1233 Willowbrook Drive, Apt. 1, Huntsville, Alabama 35802.

#### **RELATED APPEALS AND INTERFERENCES**

There are no other appeals and/or interferences known to Appellant.

#### **STATUS OF CLAIMS**

Appellant has appealed to the Board of Patent Appeals and Interferences from the final rejection of claims 1 through 20.

#### **STATUS OF AMENDMENTS**

Appellant has filed herewith, attached hereto as Exhibit B, an amendment to the claims pursuant to MPEP § 1207. No amendments have been entered since Appellant's response dated November 23, 2004.

## SUMMARY OF THE INVENTION

The summary of this invention is taken from the specification and particularly from the detailed description thereof, which begins at page 5, Paragraph [0026] of the specification and continues through page 9, paragraph [0042] thereof, and which is reproduced below. It is believed that this detailed description, which is relatively short, comprises a concise explanation of the invention defined in the claims at issue in this appeal. To facilitate review of the following description, a copy of the drawings to which the description refers are attached hereto as Exhibit A.

### Detailed Description

Shown in Figure 1 is an exemplary tile 100, the inventive features of which will now be described. Tile 100 comprises tile surface 101 and a plurality of edges 105a-d. Although tile 100 is shown with four edges, it should be appreciated that tile 100 could be configured with more edges, for example, six for a hexagonally shaped tile, or with fewer edges, for example, three edges for a triangularly shaped tile, and still be within the scope of the present invention. Adjacent edges 105a and 105b comprise departures, or tabs 107a, b, that have a substantially “jigsaw puzzle-like” shape. Opposite to edges 105a and 105b, opposing edges 105c and 105d comprise recesses, or cut-outs 109b and 109a, respectively, toward the center of the tile and shaped to receive tabs 107b and 107a.

Cartesian grid 102 appears on tile surface 101. Cartesian grid 102 may be etched upon tile surface 101, painted onto tile surface 101, or affixed to tile surface 101 with overlaying strips bonded thereto. Alternatively, the Cartesian grid could be sublimated or embedded into the tile substrate thereby avoiding the need to apply the grid to the substrate surface. Preferably, Cartesian grid 102 is printed directly on tile surface 101 such that grid delineations do not present irregularities in tile surface. Such irregularities could inhibit or prevent movement of playing pieces 104 by simply sliding from grid square to grid square, or present an irregular surface for using an erasable marker. It should be appreciated that a honeycomb grid, comprised of hexagons, could be used as well.

Tile 100 can be made from any suitable polymeric or other lightweight material that can provide a sufficiently non-flexible tile. For example, tile 100 may be formed with a lightweight metal or wood support, assuming the metal or wood used is compatible with the application of a grid and

a dry-eraseable surface. A prototype has been constructed by forming tile 100 from polystyrene. Polystyrene has many qualities which make this polymeric preferable for the application of forming tile 100 including, but not limited to, heat tolerance and hardness, as would be appreciated by those skilled in the relevant arts.

Tile surface 101 is a dry-erase surface, that is, it is compatible with the use of dry-erase markers upon it such that marks from such a dry-erase marker are non-permanent and easily erasable without resort to solvent, e.g., water or cleaning solution. Construction of dry-erase surfaces is well-known. They can be constructed by laminating a substrate with a polypropylene layer. In the alternative, a substrate, for example, one comprised of polystyrene, may be treated with a clear polymer sealant coating to provide a dry-erase compatible surface. If this method is employed, it is preferable to print grid delineations 102 upon tile surface 101, and then clad the entire surface with the clear polymer in order to obtain a smooth surface. However, if the grid delineations are dry-erase compatible themselves, they could be printed on top of the clear polymer surface. For example, grid delineations may be applied to tile surface 101 using a colored polymer sealant that would be compatible with the use of dry-erase markers. Also, the grid lines could be sublimated into the dry-erase surface. Lastly, certain materials may be used in the fabrication of a tile which are compatible with the use of dry-erase markers without treating or laminating of any kind.

It should be noted that as shown in Figure 1, tab 107a is of a different size than tab 107b and that, likewise, recess 109a is of a different size than adjacent recess 109b. Furthermore, tab 107a is configured to fit snugly into recess 109a of another tile and likewise tab 107b is configured to fit snugly into recess 109b of another tile. In the preferred embodiment, grid delineations 102 align with grid delineations of interconnecting tiles such that two or more interconnected tiles provide the appearance of an uninterrupted grid over the gaming plane formed by a plurality of interconnected tiles. The difference in sizes of the tabs and corresponding recesses ensure that tiles are interconnected in a proper relative orientation with respect to one another to provide alignment of the respective tile grids in order to achieve this uninterrupted, continuous grid effect. However, the differently sized tabs are not an essential part of the design, but merely a function of the grid design being employed. If a homogeneous, symmetric grid design is used instead, the tabs could be identical and thereby allow tile 100 to be interconnected with other like tiles in one of two orientations.

Tile 100, when composed of polystyrene, is preferably about one-eighth inch in thickness and can be injection molded or compression molded. Other methods of fabricating a tile in accordance with the present invention would be known to those skilled in the relevant arts with the benefit of reading this disclosure.

Tile 100 is also preferably configured such that a gap between any of such tiles interconnected is no more than about one-sixty-fourth of an inch. This tight gap provides a smooth plane on which to draw with a dry-erase marker or slide playing pieces 104 from tile to tile.

Tabs 107a, b and recesses 109a, b are shaped to provide a fit that results in a substantially planar surface formed by the interconnecting of two or more such tiles, where such substantially planar surface is resistant to deformation. In addition, in the preferred embodiment, tabs 107a, b and recesses 109a, b are also shaped to allow relatively easy disconnection and reconnection of tiles.

Furthermore, it will be appreciated by those skilled in the relevant arts that the jigsaw-puzzle-type tabs 107a, b and recesses 109a, b are not the only technique of interconnecting two or more such tiles according to this invention. Without limitation, Figures 1A-G display examples of various interconnecting techniques.

Figures 1A & 1B display an exemplary ball-and-socket joining technique where tile 100 comprises one or more pegs 103 extending from one edge and aperture 113 configured to receive peg 103 bored into an opposing edge. Alternatively, a similar technique could be employed where peg 103 does not comprise a ball.

Figures 1C & 1D illustrate a hook method whereby tile 100 comprises an edge which forms an overhand hook and another edge which forms an underhand hook 120 into which the overhand hook is received as shown in Figure 1D.

Figures 1E & 1F display a tongue-and-groove method whereby tile 100 comprises an edge extending from which is tongue 117 and an edge carved out of which is a groove 121 which receives tongue 117, as shown in Figure 1F.

Figure 1G illustrates a tile 100 with edges which have a substantially wedge-shaped cut-out 130. Two such tiles are interconnected by means of a butterfly key 135 inserted into wedge-shaped cut-outs 130 of two interconnecting tiles 100. Without limitation, the shape of the key and cut-out has substantial capacity for variation.

Figure 1H depicts a further embodiment wherein tile 100 comprises one or more pieces of magnetic material of a certain polarity 141 in an edge and magnetic material of opposite polarity 140

on a connecting edge. Magnetic materials 141, 140 are mated such that the attraction between the two hold the two tiles 100 together. It should be noted that magnetic material could be embedded with the plastic instead of exposed. Other techniques may be employed to interconnect tiles 100 as would be known to those skilled in the relevant arts.

The present invention advantageously overcomes several shortcomings in current strategy game surfaces. The gaming plane formed by tiles in accordance with the present invention provides a stable platform on which to place and move playing pieces, unlike vinyl mats. The dry-erase surface allows creation of individualized maps with dry-erase markers. This results in ease of cleaning and re-use of the entire gaming surface. In addition, in the event game action progresses to the edge of the gaming plane, modularity due to the gaming plane being formed from interconnected tiles and the fact that the tiles comprise dry-erase surfaces result in adapting the game to an updated map without cleaning an entire gaming surface.

Illustrated by reference to Figures 2 and 3, gaming plane 200 comprises a plurality of interconnected tiles 100. It should be noted that, in accordance with the preferred embodiment described herein, tiles 100 are interconnected such that grid 102 appears uninterrupted over the gaming plane 200. Individualized map 202 is drawn upon the dry-erase surface of gaming plane 200 formed by interconnected tiles 100. Arrow 205 simply indicates the direction playing pieces 104 are progressed through individualized map 202 upon gaming plane 200. As shown, playing pieces 104 have reached the edge of the existing map 202.

Turning to Figure 3, tiles 100a, b and 100e have been removed from their respective previous locations, wiped clean and reconnected with gaming plane abutting tile 100c. Tiles 100a, b and 100e, plus a portion of tile 100c, have been drawn upon with an updated map 301 that is an extension of individualized map 202.

### ISSUES

1. Whether the Examiner erred in rejecting claims 1-7, 9, 11-17, 19 under 35 U.S.C. § 102(b) as being allegedly anticipated by *Bassett*, U.S. Pat. No. 3,057,624 (the “ ‘624 Patent”).
2. Whether the Examiner erred in rejecting claims 1-7, 9, 11-17, 19 under 35 U.S.C. § 103(a) as being unpatentable over the ‘624 Patent in view of *Ward* U.S. Pat. No. 4,060,246 (the “ ‘246 Patent”).

## GROUPING OF CLAIMS

The Examiner has rejected all of the claims of the Application. Appellants believe the Claims may be addressed as one group.

## ARGUMENT

### A. Overview of the Cited References

The Examiner finally rejected claims 1 through 20 of the present application under 35 U.S.C. § 102 or § 103 as being unpatentable over the '624 Patent and/or the '246 Patent. The '624 Patent discloses a segmented board for games such as checkers and the like comprised of a plurality of interlocking tiles. The tiles are disclosed to be a "two ply member formed of cardboard, plastic, or any other suitable material". *Bassett*, Col. 2, ll. 2-3. There is no teaching that the game board or the tiles comprising the game board are proposed to be marked or drawn upon.

The '246 Patent discloses a game for simulating a horse race betting parlor that includes one or more panels for displaying race results to the players. The panels are described as possibly being formed such that they are suitable to be marked upon with a pencil or pen. *See Ward*, Col. 5, ll. 1-5. The panels are also described to be formable with a hard surface suitable to be used with a readily erasable felt-tip marking pen, to include a "Rite-On Wipe-Off" marker-pen. *See id.*, at ll. 35-52. However, there is no teaching that the panels are to be segmented or otherwise interlocking with other panels.

### B. Claim Rejections under § 102

#### *1. Standard for Standard for § 102 Rejections*

"For a prior art reference to anticipate in terms of 35 U.S.C. Section 102, every element of the claimed invention must be identically shown in a single reference." *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677, 7 U.S.P.Q.2d 1315, 1317 (Fed. Cir. 1988; emphasis added). The disclosed elements must be arranged as in the claim under review. *See Lindemann Machinefabrik v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 U.S.P.Q. 481, 485 (Fed.

Cir. 1984). If any claim, element, or step is absent from the reference that is being relied upon, there is no anticipation. Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 230 U.S.P.Q. 81 (Fed. Cir. 1986; emphasis added). Anticipation under 35 U.S.C. Section 102 requires that there be an identity of invention. See Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 619, 225 U.S.P.Q. 634, 637 (Fed. Cir. 1985; emphasis added). In PTO proceedings, claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 U.S.P.Q. 385, 388 (Fed. Cir. 1983). The following analysis of the present rejections is respectfully offered with guidance from the foregoing controlling case law decisions.

2. *The '624 Patent Fails to Disclose, Expressly or Inherently, All of the Limitations Claimed*

In the Final Office Action from which this Appeal is taken, Examiner argues that the '624 Patent discloses that its board may be formed of plastic and further that plastic is well-known substantially non-porous material that is suitable for use with dry-erase markers. The limitation in Claims 1 and 11, the independent claims, is directed to a tile with a *substantially* non-porous surface that is suitable for use with dry-erase markers. However, the '624 Patent fails to teach or suggest anything about the surface of its game board, does not teach or suggest anything regarding whether the board is designed to be marked upon, and does not teach or suggest anything regarding the use of dry-erase markers. Therefore, Examiner's contention may only be true if such the '624 Patent's disclosure of plastic as a constituent material inherently teaches the claimed surface. See Detailed Action, Page 2. (Examiner argues that substantially non-porous surface is inherently disclosed)

For a claim to be inherently anticipated, the feature or result the Examiner claims to be inherently taught must occur or be present in every use of the material. The law is well-settled that "[i]nherency, . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ 1949, 1950-1 (Fed. Cir. 1999); see also *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1946 (Fed. Cir. 1999), *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 314 (Fed. Cir. 1983). In other words, if there can be surfaces made of plastic that are not compatible with the use of dry-erase markers such that marks may be easily erased, then the substantially non-porous surface is not an inherent result of the use of plastic as a



material to form the game board of the '624 Patent, and the '624 Patent does not anticipate the present invention.

Appellants contend that those skilled in the art will appreciate that tiles similar to those taught in the '624 Patent may be formed of plastic but would not possess non-porous surfaces suitable for use with dry-erase markers. *See Ward*, Col. 5, ll. 30-61. Those of ordinary skill in the art recognize that surfaces upon which dry-erase markers may be used such that marks are readily erasable are non-porous surfaces and that simple plastic, without a treatment of its surface, does not provide a proper surface for use with dry-erase markers. As such, the '624 Patent fails to inherently disclose the surface claimed in the present application because a non-porous surface does not result from every use of plastic to form a game board.

Moreover, the '624 Patent fails to disclose, expressly or otherwise, the limitation added by present Amendment of each side comprising interconnecting means so that each tile may be mutually interconnected with any other tile. Since the '624 Patent does not inherently disclose the claimed limitations, it does not anticipate the present invention as claimed in Claims 1 and 11. Further, since the reference does not anticipate the independent claims, it does not anticipate the claims that depend therefrom. Therefore, the Examiner erred in rejecting Claims 1-7, 9, 11-17, 19 and such claims are allowable over the '624 Patent.

### C. Claim Rejections Under § 103

#### 1. *Standard for § 103 Rejections*

In order to establish a *prima facie case of obviousness* under 35 U.S.C. § 103, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *See* MPEP Section 706.02(j). Second, there must be a reasonable expectation of success. *Id.* Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *Id.*

Under the first criteria, the suggestion, teaching or motivation to combine prior art references may flow, *inter alia*, from the references themselves, and the knowledge of one ordinary skill in the art or the nature of the problem to be solved. *See Winner International Royal Corp. v Wang*,

202 F.3d 1340, 53 U.S.P.Q. 2d 1580 (Fed. Cir. 2000); *In re Fine*, 837 F. 2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q. 2d 1941 (Fed. Cir. 1992) Although a reference need not expressly teach that the disclosure contained therein should be combined with another, showing of combinability, in whatever form must nevertheless be “clear and particular.” *Winner International Royal Corp.*, 202 F. 3d at 1586. Since there is no motivation or suggestion to combine the references, one of ordinary skill in the art would not have viewed the Appellant’s invention as obvious. See *In re Danco*, 160 F. 3d 1339, 1343, 48 U.S.P.Q. 2d 1635, 1639 (Fed. Cir. 1998); *Gambro Lundia AB v Baxter Healthcare Corp.*, 110 F. 3d 1573, 1578, 42 U.S.P.Q. 2d 1378, 1383 (Fed. Cir. 1997). (“The absence of such a suggestion to combine is dispositive in an obviousness determination”.)

The second criteria in order to establish a *prima facie* case of obviousness, is that there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Obviousness does not require absolute predictability, however, at least some degree of predictability is required. Evidence showing there is no reasonable expectation of success may support a conclusion of non-obviousness. *In re Rinehart*, 531 F.2d 1048, 189 U.S.P.Q. 143 (CCPA 1976).

The last criteria to establish a *prima facie* case of obviousness of a claimed invention is that all the claimed limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (CCPA 1970). If an independent claim is not obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). It is the first and third criteria under the standard for a § 103 rejection which Applicants will focus their arguments on.

## 2. *The Rejections of Independent Claims 1 and 11*

Examiner states that the ‘624 Patent teaches a gaming plane having a plurality of tiles, that each have at least three sides that comprise means for interconnecting, and then reasserts the contention that simply because the ‘624 Patent discloses that the board may be made by a plastic

material, that the surface is inherently substantially non-porous and suitable for use with dry-erase markers. Examiner next argues alternatively that even if the '624 Patent is deemed not to disclose such a surface, the '246 Patent does, and attempts to use the '246 Patent to bolster the inherency argument.

a. There is no suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

With the standard for a *prima facie* case of obviousness in mind, the references do not suggest or motivate one of ordinary skill in the art to modify it in any way or to combine it with any other reference teachings, particularly those of the '624 Patent and the '246 Patent, to provide a game board comprising a plurality of interconnecting tiles which are formed with substantially non-porous surfaces for use with dry-erase markers. A showing of a suggestion, teaching, or motivation to combine prior art references as required to find an invention obvious must be clear and particular and broad conclusory statements of the teaching of multiple references, standing alone, are not evidence. See *Brown & Williamson Tobacco Corp. v Phillip Morris Inc.*, 229 F. 3d 1120, 1124, 56 U.S.P.Q. 2d 1456, 1460 (Fed. Cir. 2000.) The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q. 2d 1430 (Fed. Cir. 1990).

1) *The '624 Patent.* The '624 Patent does not suggest or motivate one of ordinary skill in the art to modify it in any way or to combine it with other reference teachings. Specifically, the '624 patent does not disclose a surface upon which marks may be made using dry-erase markers. Indeed, the '624 patent does not teach or suggest drawing upon its game board at all. In fact, the games taught to be played upon the game board disclosed in the '624 Patent, are not games involving drawing, but are games such as "chess, checkers, and the like." *Bassett*, Col. 1, l. 12. Obviously, these games do not involve, anticipate or require drawing of any sort. Not only does this reference not expressly teach that the disclosure contained therein should be combined with another, but the Examiner has provided no showing of combinability, in any form, which is "clear and particular." See *In re Dembiczak*, 175 F. 3d 994, 1000, 50 U.S.P.Q. 2d 1614, 1620 (Fed. Cir. 1999).

2) The '246 Patent. Lastly, the '246 Patent merely discloses a game that uses panels that may comprise a surface compatible with the use of dry-erase markers. However, there is no suggestion, expressly or implicitly, to modify the boards of the game to make interconnecting tiles. Broad conclusory statements regarding the teaching of multiple prior art references, are not evidence of a motivation to combine those references as would support a claim of obviousness. *See Ecobchem, Inc. v Southern California Edison Co.*, 227 F. 3d 1361, 1372, 56 U.S.P.Q. 2d 1065, 1076 (Fed. Cir. 2000.)

35 U.S.C. § 103 makes clear that the obviousness analysis should take place, “at the time the invention was made.” *In re Dembiczak*, 175 F. 3d 994, 50 U.S.P.Q. 2d 1614, 1616 (Fed. Cir. 1999). It is this phrase that guards against entering into the “tempting but forbidden zone of hindsight.” *Id.* “Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 175 F. 3d at 999, 50 U.S.P.Q. 2d at 1617. The only motivation offered by the Examiner at page 3 of the Detailed Action is as follows:

Board game art area is a highly competitive area and using substantially non-porous dry-erase surface such as plastic facilitates using the same board over and over again saving cost, thus making the game less costly.

In order to save money, it would have been obvious to use plastic material that are substantially non-porous and compatible to dry-erase markers by using the same board over and over again. One of ordinary skill in the art at the time the invention was made would have suggested using plastic material that are substantially non-porous and compatible to dry-erase markers by using the same board over and over again for the purpose of money.

This motivation, saving money, proposed by the Examiner, is far different than the goal of Claims 1 and 11 (providing a game board surface upon which maps are drawn, that may be adapted to continue the hand-drawn maps when the game is about to progress off the game board). Moreover, Examiner provides no basis for these “Official Notice” assertions regarding board game

art area pursuant to 2144.03 of the MPEP. *See in Re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420-421 (CCPA 1970) (assertions of technical facts must always be supported by citation of some reference works). As such Appellant respectfully traverses such assertions. In summary, it is a basic tenant of patent law that the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination when applying 35 U.S.C. § 103 to reject a claim or claims. *See In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q. 2d 1443 (Fed. Cir. 1992); *In re Eli Lilly & Co.*, 402 F.2d 943, 14 U.S.P.Q. 2d 1741 (Fed. Cir. 1990). The ultimate determination of whether an invention would have been obvious is a legal conclusion based on the totality of the evidence including underlying factual inquiries including the differences between the claimed invention and the prior art, and the objective evidence of non-obviousness. *See Brown & Williamson Tobacco Corp.*, 229 F.3d. at 1124. A review of the references indicates that they do not suggest the desirability of combining interconnecting tiles that form a game board of the '624 with a surface upon which dry-erase markers may be used. Moreover, if the Examiner is attempting to argue that the suggestion, teaching, or motivation to combine the two references patent flows from the knowledge of one of ordinary skill in the art, he has provided no evidence to that affect, and instead has offered only conclusory statements. It is clear that the Examiner here used the teaching of the present invention to combine the '624 and '246 Patents. "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992)(quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988)).

For these reasons, among others, applicants respectively submit that the 35 U.S.C. § 103(a) rejections of independent Claims 1 and 11 have been overcome, and that they are now in condition for allowance.

Claims 2-10, and 12-20 depend either directly or indirectly from Claims 1 and 11 and thus incorporate the limitations of the independent claim. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious as well. *See In re, Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). The Patent Office has provided no

other base references upon which to build arguments for rejections of the dependent claims. Accordingly, Applicants respectfully submit that dependent Claims 2-10 and 12-20 are in condition for allowance as well.

**3. *The prior art references do not teach or suggest all of the claim limitations.***

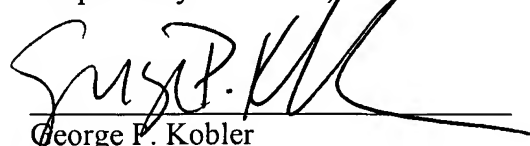
Claims 1 and 11, as amended, contain limitations not taught or suggested in the prior art references cited by Examiner. Specifically, together the references fail to solve the problem solved by the present invention, i.e., providing an adaptable game board. The present invention addresses this by providing tiles that are mutually interlocking, or interconnecting, meaning that each tile provided may be interconnecting with any other tile. Thus, means for interconnection are provided on each side of the tiles. While the '624 Patent teaches interlocking segments, the segments must be interconnecting in a specific manner in order to achieve the game board. As discussed above, Examiner attempts to combine the '246 Patent because of its disclosure of a surface compatible with dry-erase markers. Thus, the combination of '624 and the '246 Patent fails to teach every limitation claimed.

**CONCLUSION**

In conclusion, Appellant respectfully submits that, in view of the foregoing, and in view of the prior amendments and arguments in this case, Claims 1-20 define tiles for an adaptable game board, each having substantially non-porous surface upon which marks may be made with dry-erase markers, not taught or suggested by any of the above cited references, either alone or in combination. Accordingly, it is respectfully submitted that Claims 1-20 are now in condition for allowance. An earlier notice of reversal of the Examiner's rejection is therefore earnestly solicited.

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## **APPENDIX OF THE CLAIMS INVOLVED IN THIS APPEAL**

1. A portable, adaptable gaming plane, said gaming plane providing an area upon which to draw erasable maps for strategy games comprising a plurality of interconnecting tiles, each of said tiles being a substantially non-flexible tile and comprising:
  - a. at least three edges, each of said at least three edges comprising means for interconnecting;
  - b. a substantially non-porous surface compatible with the use of a dry-erase marker such that marks upon said surface made using said dry-erase marker are easily erased; and
  - c. a grid perceptible on said surface, said grid formed by delineations such that said delineations align with delineations forming like grids perceptible on like tiles interconnected with said tile.
2. The portable, adaptable gaming plane of Claim 1, wherein said means for interconnecting comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said other like tiles.
3. The portable, adaptable gaming plane of Claim 2, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.
4. The portable, adaptable gaming plane of Claim 1, wherein said grid comprises one of a Cartesian grid and a honeycomb grid formed by said delineations.

5. The portable, adaptable gaming plane of Claim 4, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.
6. The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said other like tiles.
7. The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises:
  - a. at least one peg extending centrifugally from at least one edge of said tile; and
  - b. at least one aperture recessing centripetally from at least one edge of said tile, said at least one aperture configured to lockingly receive a similarly configured peg extending from said other like tiles.
8. The portable, adaptable gaming plane of Claim 7, wherein said at least one peg further comprises a ball located at an end of said at least one peg distally from said tile center.
9. The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises
  - a. tongues extending centrifugally from adjacent edges of said tile; and
  - b. grooves recessing centripetally from edges of said tile opposite said adjacent edges, said grooves configured to lockingly receive tongues extending from said other like tiles.



10. The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises:
  - a. a first magnetic material having a polarity disposed on an at least one edge of said tile; and
  - b. second magnetic material having an opposite polarity to that of said first magnetic material disposed on an at least one edge of said tile.
11. A tile for use in assembling a portable, adaptable gaming plane, said tile being a substantially non-flexible tile, said gaming plane providing an area upon which to draw erasable maps for strategy games, said tile comprising:
  - a. at least three edges, each of said at least three edges comprising means for interconnecting at least three a plurality of like tiles therewith;
  - b. a substantially non-porous surface compatible with the use of a dry-erase marker such that marks upon said surface made using said dry-erase marker are easily erased; and
  - c. a grid perceptible on said surface, said grid formed by delineations such that said delineations align with delineations forming like grids perceptible on said like tiles interconnected with said tile irrespective of relative orientations of said tile and said like tiles.
12. The tile of Claim 11, wherein said means for interconnecting other like tiles therewith comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said plurality of like tiles.
13. The tile of Claim 12, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous

cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.

14. The tile of Claim 11, wherein said grid comprises one of a Cartesian grid and a honeycomb grid formed by said delineations.
15. The tile of Claim 14, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.
16. The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said other like tiles.
17. The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises:
  - a. at least one peg extending centrifugally from at least one edge of said tile; and
  - b. at least one aperture recessing centripetally from at least one edge of said tile, said at least one aperture configured to lockingly receive a similarly configured peg extending from said other like tiles.
18. The tile of Claim 17, wherein said at least one peg further comprises a ball located at an end of said at least one peg distally from said tile center.
19. The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises

- a. tongues extending centrifugally from adjacent edges of said tile; and
  - b. grooves recessing centripetally from edges of said tile opposite said adjacent edges, said grooves configured to lockingly receive tongues extending from said other like tiles.
20. The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises:
- a. a first magnetic material having a polarity disposed on an at least one edge of said tile; and
  - b. second magnetic material having an opposite polarity to that of said first magnetic material disposed on an at least one edge of said tile.



## EXHIBIT A

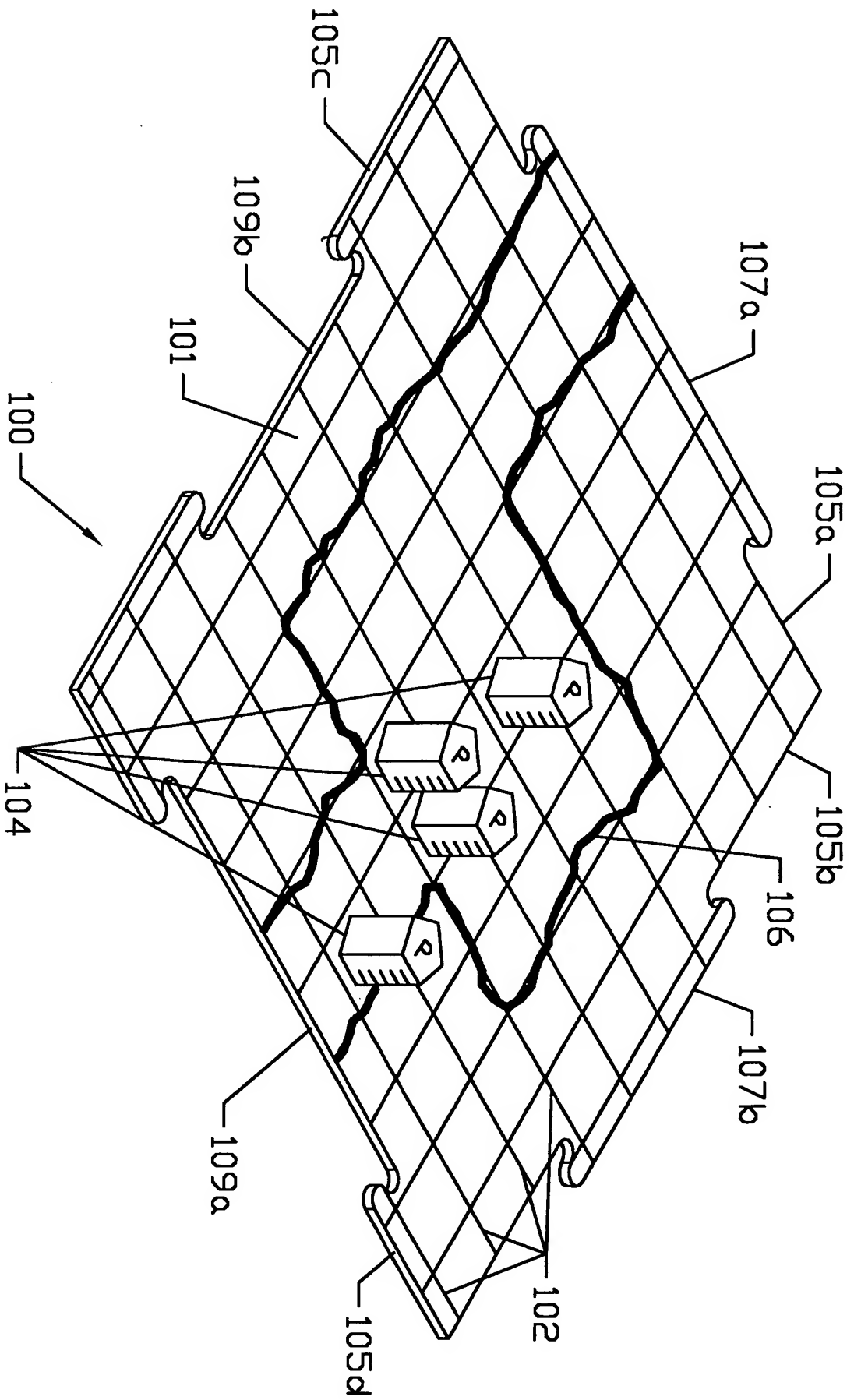


FIGURE 1

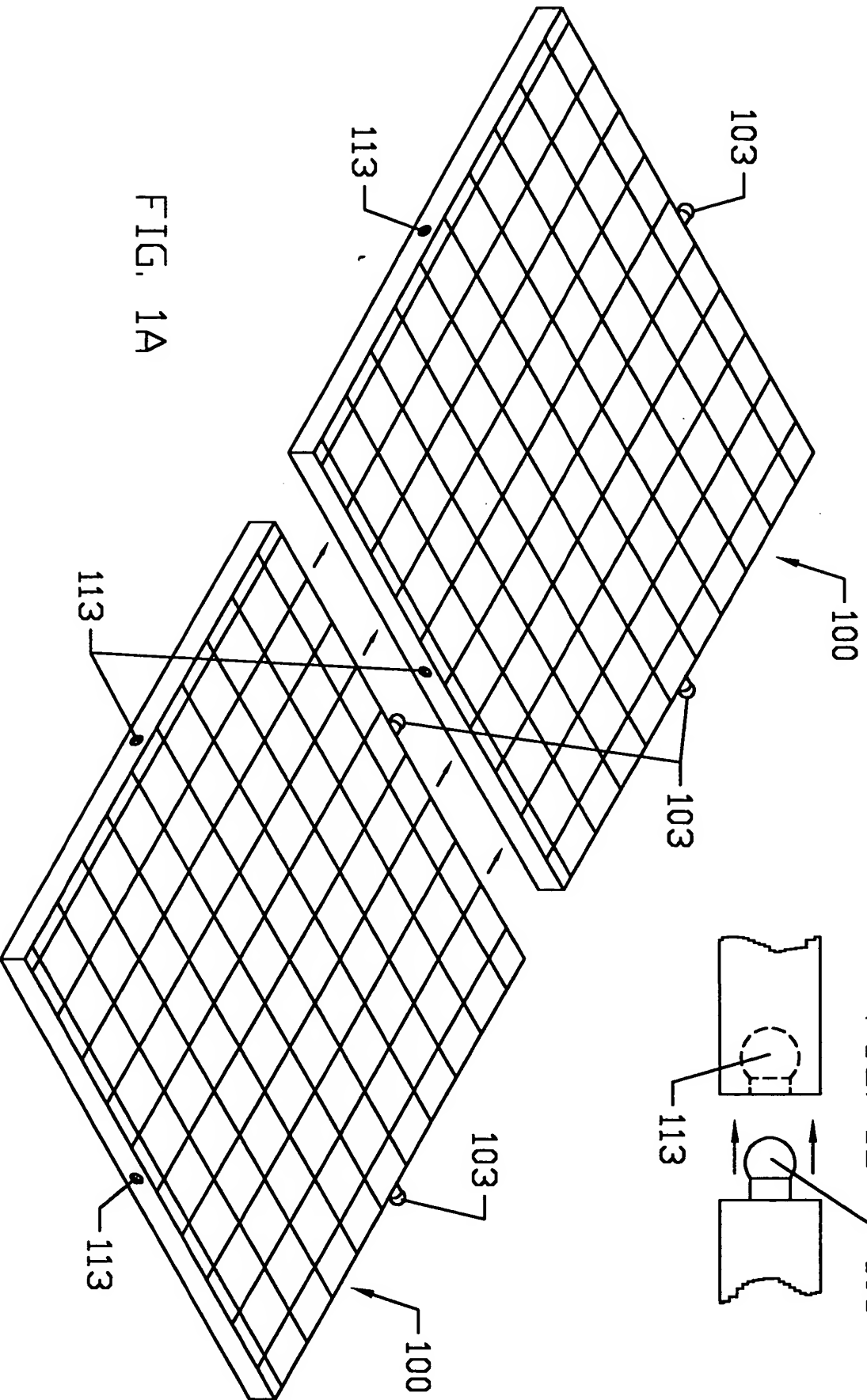


FIG. 1A

FIG. 1B

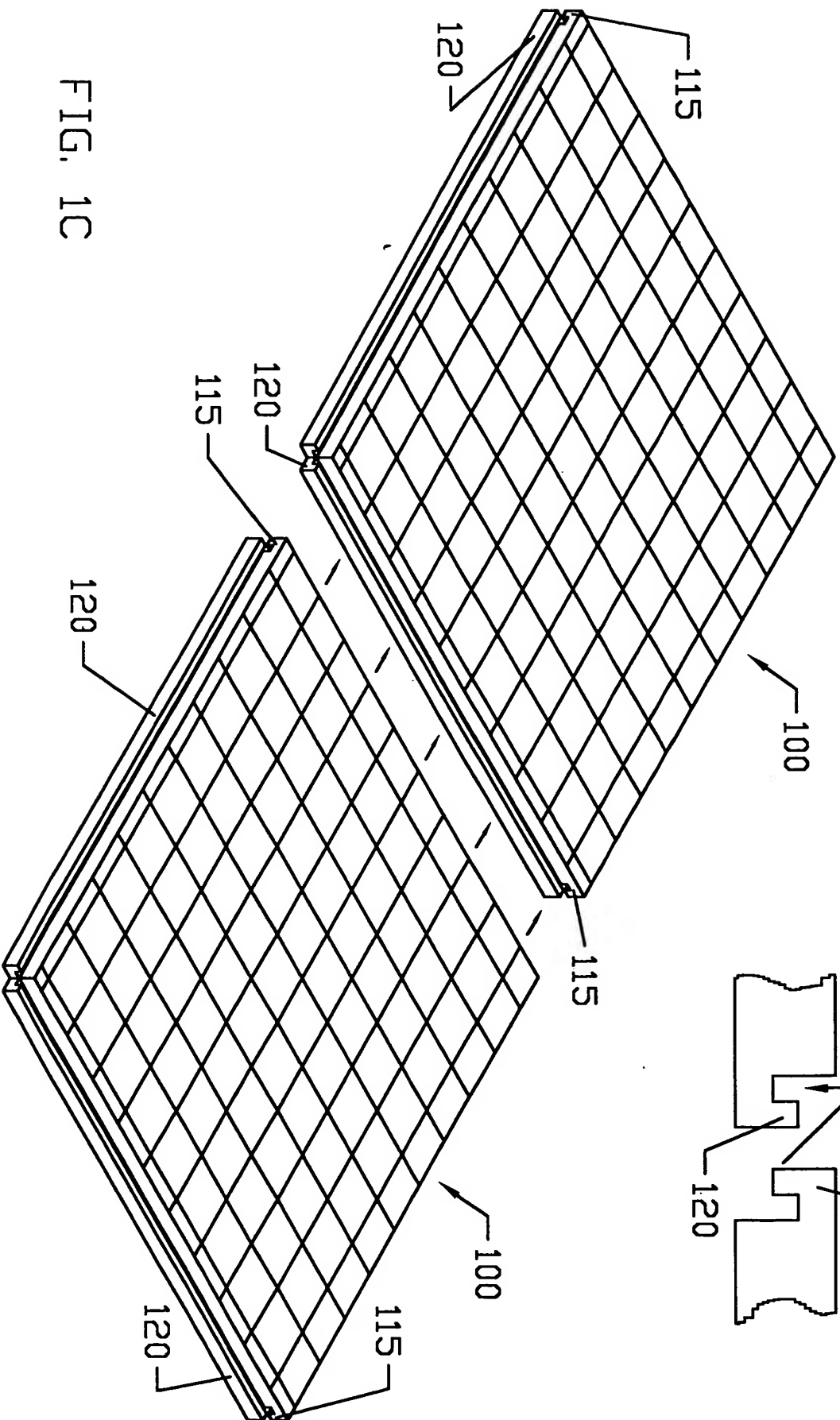


FIG. 1C

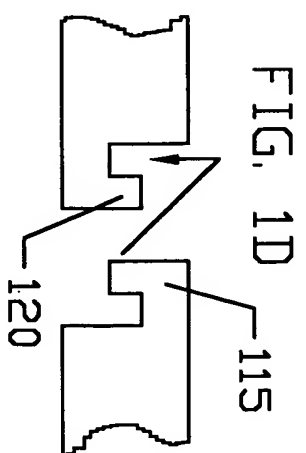
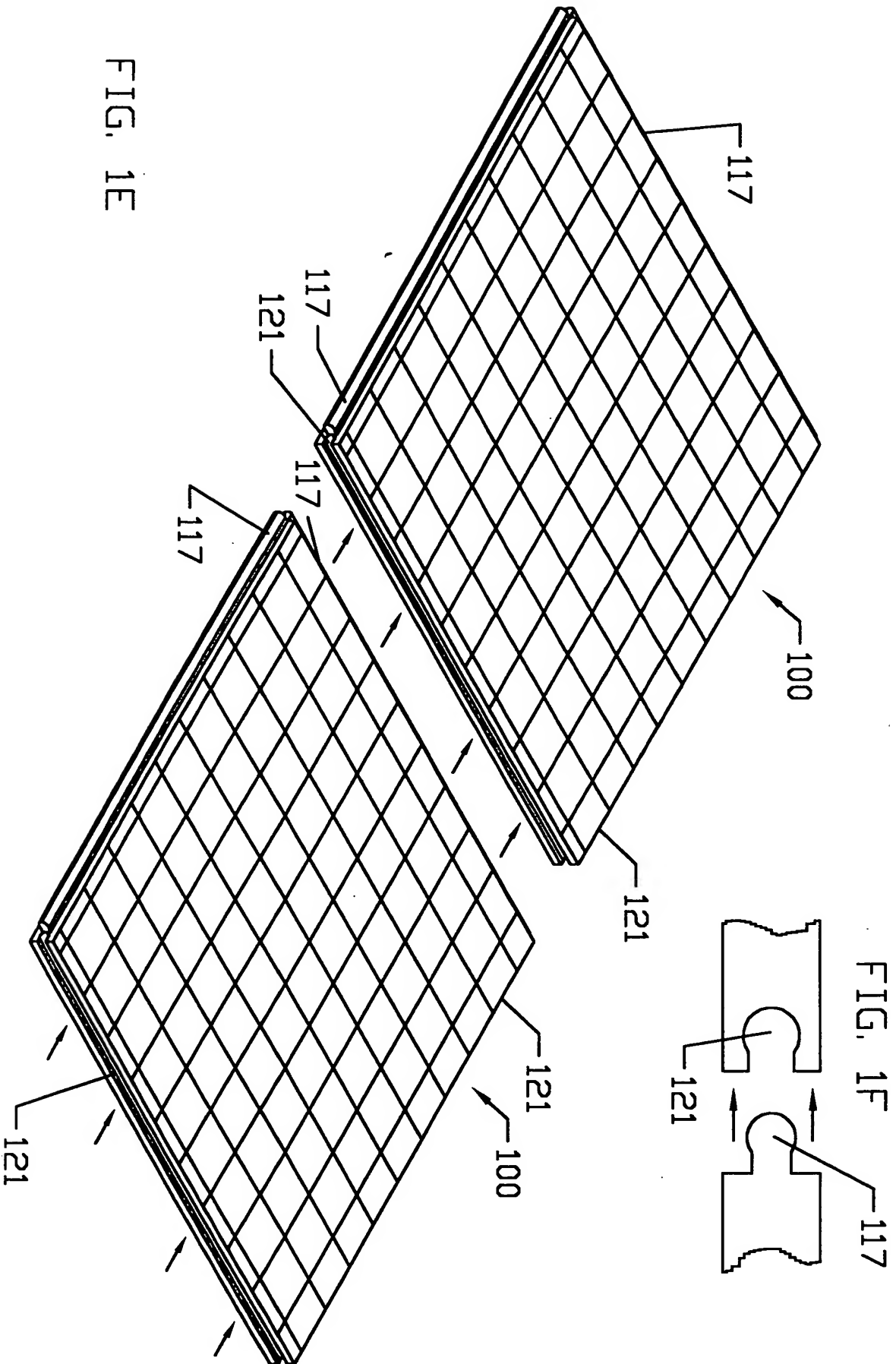


FIG. 1D





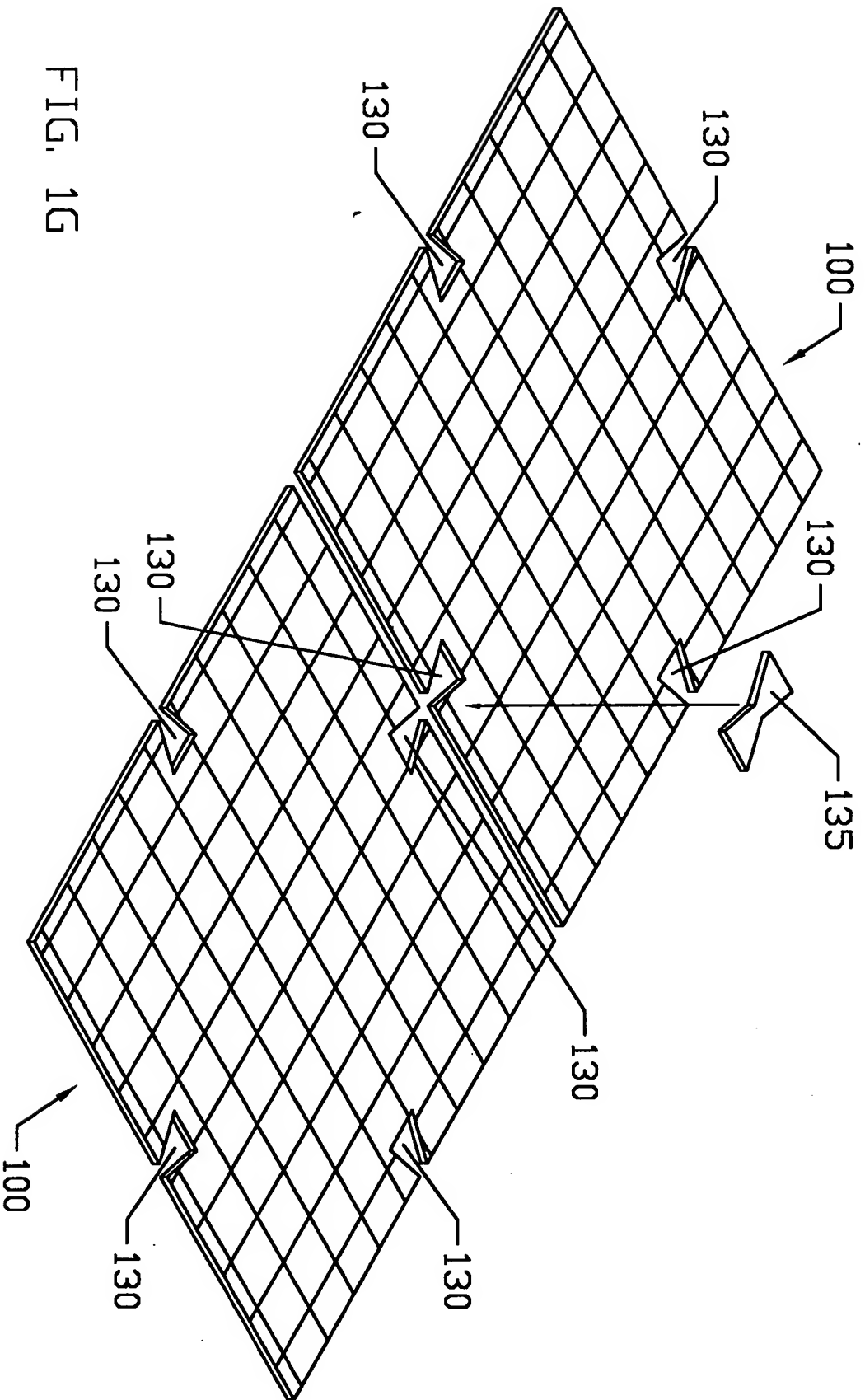
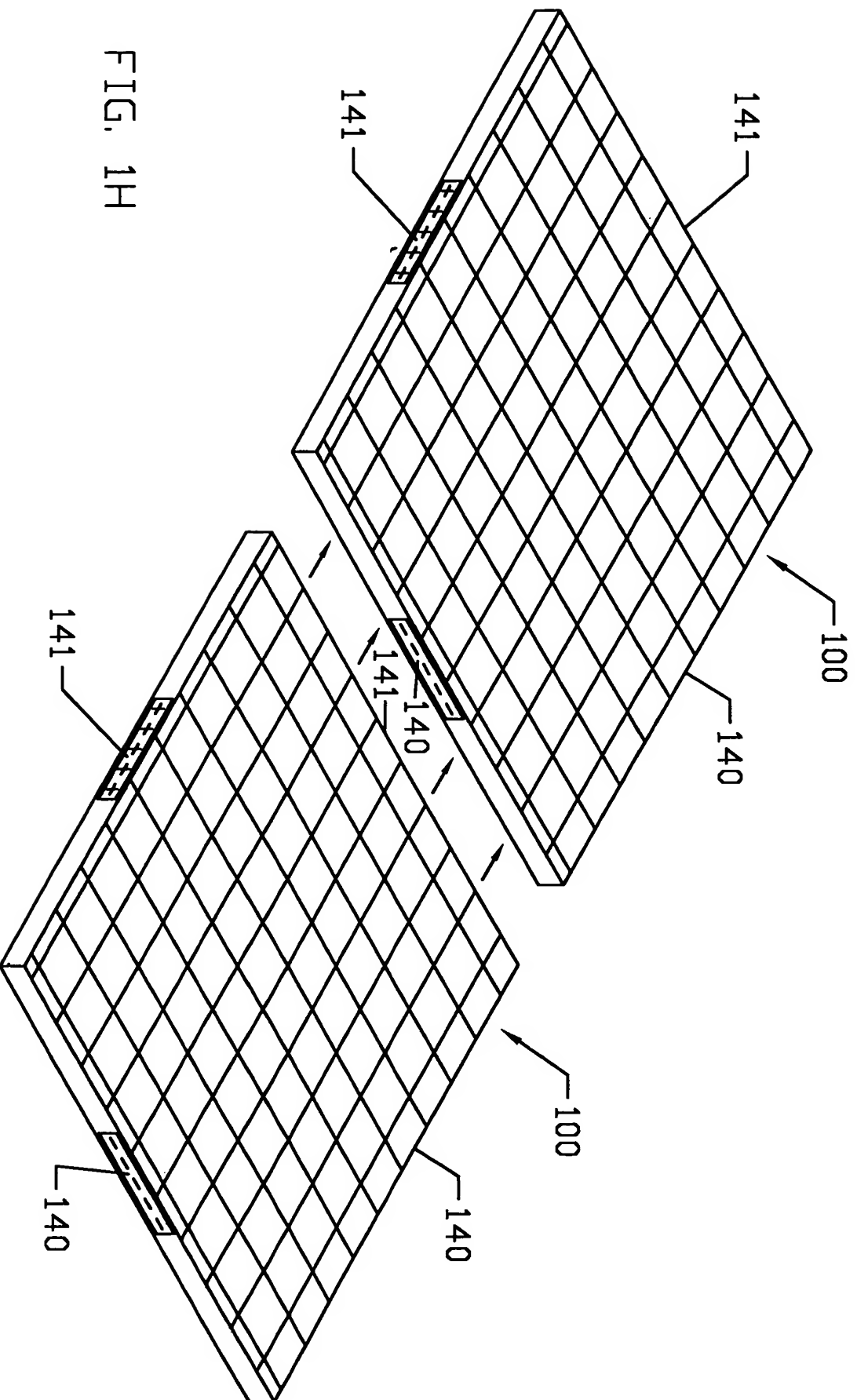


FIG. 1G



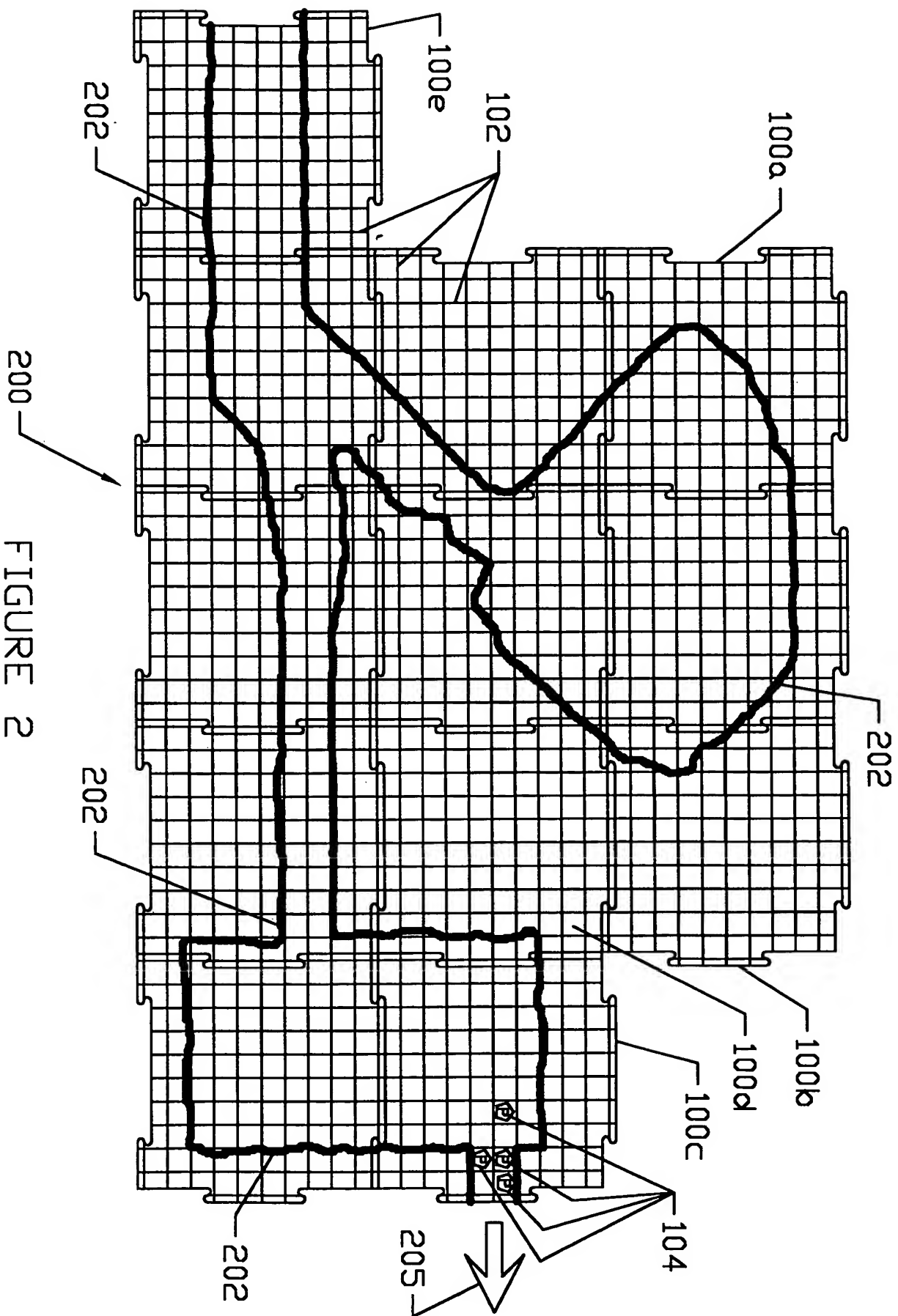


FIGURE 2

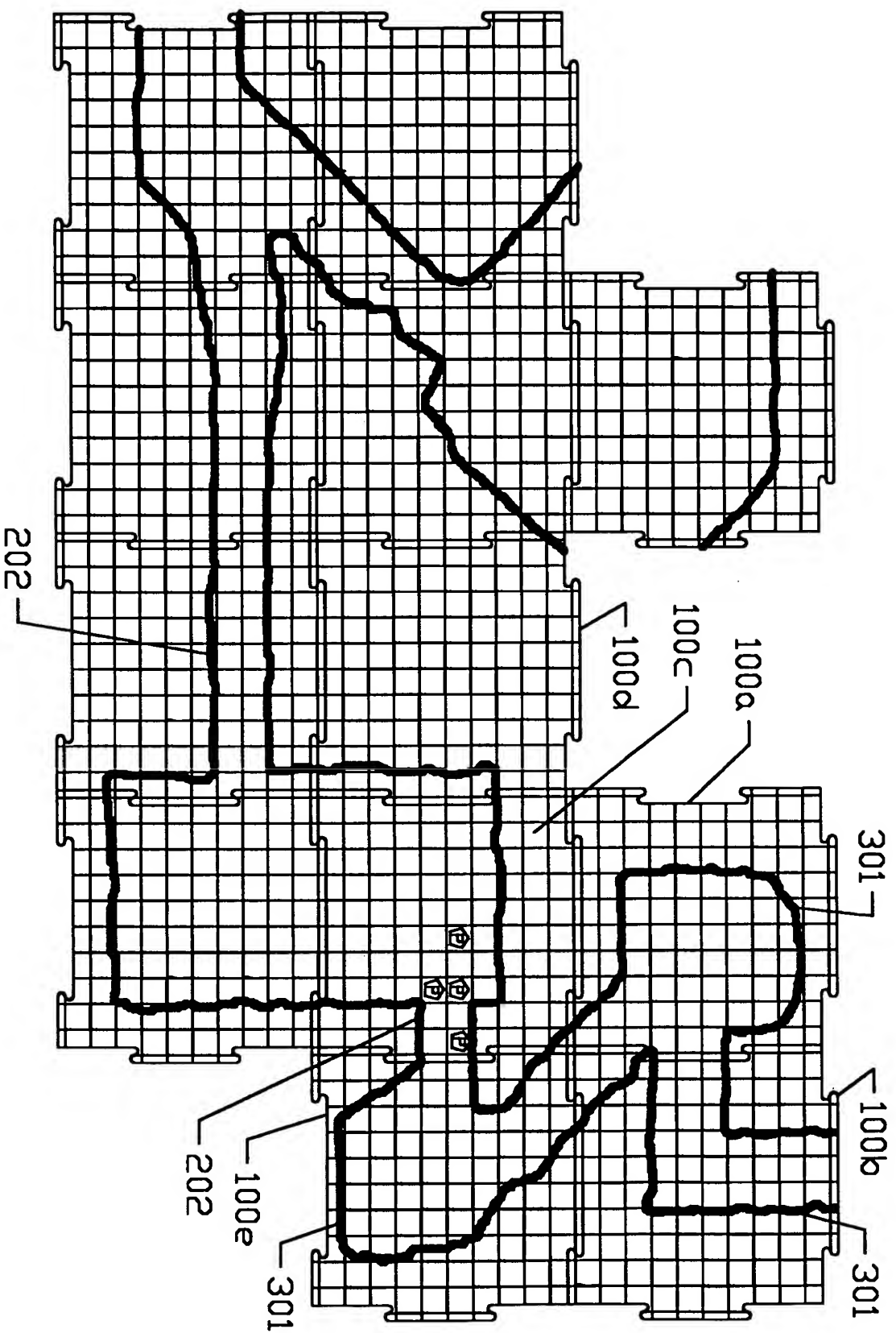
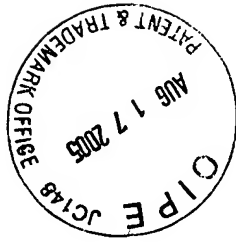


FIGURE 3



## EXHIBIT B



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Belcher, Thomas S., *et al*

Examiner: Mendiratta, Vishu K.

App. Serial No. :10/627,440

Filed: July 25, 2003

Art Unit: 3711

Title: *A Portable, Adaptable Drawing Surface  
for Strategy Games*

AMENDMENT UNDER 37 C.F.R. §1.116

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Honorable Commissioner:

Pursuant to 37 C.F.R. § 1.116/MPEP §1207, Appellant respectfully requests entry of the following amendments.

## AMENDMENTS TO THE CLAIMS

Pursuant to MPEP §1207, please enter the following amendments.

1. (Currently Amended) A portable, adaptable gaming plane, said gaming plane providing an area upon which to draw erasable maps for strategy games comprising a plurality of interconnecting tiles, each of said tiles being a substantially non-flexible tile and comprising:
  - a. at least three edges, each of said at least three edges comprising means for interconnecting;
  - b. a substantially non-porous surface compatible with the use of a dry-erase marker such that marks upon said surface made using said dry-erase marker are easily erased; and
  - c. a grid perceptible on said surface, said grid formed by delineations such that said delineations align with delineations forming like grids perceptible on like tiles interconnected with said tile.
2. (Original) The portable, adaptable gaming plane of Claim 1, wherein said means for interconnecting comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said other like tiles.
3. (Previously presented) The portable, adaptable gaming plane of Claim 2, wherein said tile

comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.

4. (Original) The portable, adaptable gaming plane of Claim 1, wherein said grid comprises one of a Cartesian grid and a honeycomb grid formed by said delineations.
5. (Previously presented) The portable, adaptable gaming plane of Claim 4, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.
6. (Original) The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said other like tiles.
7. (Original) The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises:
  - a. at least one peg extending centrifugally from at least one edge of said tile; and
  - b. at least one aperture recessing centripetally from at least one edge of said tile, said at least one aperture configured to lockingly receive a similarly configured peg



extending from said other like tiles.

8. (Original) The portable, adaptable gaming plane of Claim 7, wherein said at least one peg further comprises a ball located at an end of said at least one peg distally from said tile center.
9. (Original) The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises
  - a. tongues extending centrifugally from adjacent edges of said tile; and
  - b. grooves recessing centripetally from edges of said tile opposite said adjacent edges, said grooves configured to lockingly receive tongues extending from said other like tiles.
10. (Original) The portable, adaptable gaming plane of Claim 5, wherein said means for interconnecting comprises:
  - a. a first magnetic material having a polarity disposed on an at least one edge of said tile; and
  - b. second magnetic material having an opposite polarity to that of said first magnetic material disposed on an at least one edge of said tile.
11. (Currently Amended) A tile for use in assembling a portable, adaptable gaming plane, said tile being a substantially non-flexible tile, said gaming plane providing an area upon which to draw erasable maps for strategy games, said tile comprising:
  - a. at least three edges, each of said at least three edges comprising means for

interconnecting at least three ~~a plurality of~~ like tiles therewith;

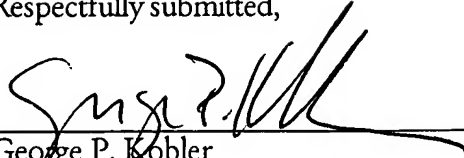
- b. a substantially non-porous surface compatible with the use of a dry-erase marker such that marks upon said surface made using said dry-erase marker are easily erased; and
  - c. a grid perceptible on said surface, said grid formed by delineations such that said delineations align with delineations forming like grids perceptible on said like tiles interconnected with said tile irrespective of relative orientations of said tile and said like tiles.
12. (Previously presented) The tile of Claim 11, wherein said means for interconnecting other like tiles therewith comprises:
- a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said plurality of like tiles.
13. (Previously presented) The tile of Claim 12, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.
14. (Previously presented) The tile of Claim 11, wherein said grid comprises one of a Cartesian grid and a honeycomb grid formed by said delineations.

15. (Previously presented) The tile of Claim 14, wherein said tile comprises a substrate upon which is disposed said grid and wherein said surface is achieved by overlaying a substantially non-porous cladding upon said substrate such that said grid is perceptible through said substantially non-porous cladding.
16. (Previously presented) The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises:
  - a. shaped projections extending centrifugally from adjacent edges of said tile; and
  - b. mouths recessing centripetally from edges of said tile opposite said adjacent edges, said mouths configured to lockingly receive shaped projections extending from said other like tiles.
17. (Previously presented) The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises:
  - a. at least one peg extending centrifugally from at least one edge of said tile; and
  - b. at least one aperture recessing centripetally from at least one edge of said tile, said at least one aperture configured to lockingly receive a similarly configured peg extending from said other like tiles.
18. (Previously presented) The tile of Claim 17, wherein said at least one peg further comprises a ball located at an end of said at least one peg distally from said tile center.
19. (Previously presented) The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises

- a. tongues extending centrifugally from adjacent edges of said tile; and
  - b. grooves recessing centripetally from edges of said tile opposite said adjacent edges, said grooves configured to lockingly receive tongues extending from said other like tiles.
20. (Previously presented) The tile of Claim 15, wherein said means for interconnecting said plurality of like tiles therewith comprises:
- a. a first magnetic material having a polarity disposed on an at least one edge of said tile; and
  - b. second magnetic material having an opposite polarity to that of said first magnetic material disposed on an at least one edge of said tile.

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Respectfully submitted,

  
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